forestry & natural woodland management resources

Marketing Timber

by Burnell C. Fischer, Extension Forester

All of the direct and indirect costs of owning timberland add up to a sizeable investment. Only by proper timber marketing can a satisfactory return be delivered to the woodland investor. The purpose of this publication is to discuss the key points which every woodland owner should consider when selling timber. Whether you are a novice or an old-hand at timber marketing, reviewing these topics should help you receive a fair price for your timber and minimize some of the problems encountered during a timber sale.

Timber Harvesting and Forest Management

Harvesting is important for two reasons. It is a means of selling trees for income and a means by which forests are re-established and tended. Forest management assumes that the vegetation on any site normally expands to occupy the available growing space. If the vegetation fills the growing space, the only way that the forest can be changed or controlled is by cutting trees. Thus, the harvesting of trees is an important tool in forest management. Through harvesting, a forester can influence the quality, species composition, and growth rate of the future timber stand.

Ownership objectives for woodlands are many and varied. In most situations, these objectives are at least compatible with and may require some timber harvesting. Examples of woodland management objectives compatible with timber harvesting include: maximizing dollar returns from the forest, reducing stocking to maximize tree growth, protecting immature timber while removing mature trees, protecting

forested watersheds, removing dead and dying trees, improving the wildlife habitat, enhancing forest recreation, and removing trees in a prescribed manner for a homesite. Consequently, the need for income may not be the primary objective for timber harvesting. However, whether income is or is not the primary objective of timber harvesting, proper marketing can accomplish woodland ownership objectives and optimize financial returns on the woodland investment.

Timber Markets and Stumpage Valuation

Public auctions and daily price quotes are a part of agricultural crop sales, but this is not the case for selling stumpage (standing trees). The demand for timber, either as stumpage or for unprocessed logs, comes from the primary wood-using industries. These industries convert logs to be used in a variety of cut or milled products or as raw material for the secondary wood-using industries. Each industry has species and log specification limits on the trees, logs, and chips which it can process. These specifications are related to the end-product requirements. Therefore, not all species, sizes, and grades (i.e., quality) will be demanded by any one industry. This is an important marketing consideration because it results in significant price differentials.

Stumpage value is influenced by a number of variables. The value of the product made from the wood establishes the value of the tree in the forest. If the costs of milling operations, hauling, skidding, and felling are subtracted from the final product value, the result is the stumpage value or what the landowner receives for his standing timber.

Stumpage Value = Product Value -Logging Costs - Transportation Costs

Product value is the worth of the product that is made from the standing tree. Included in this figure must be a profit for the producer. If the product value is sawlogs delivered at the mill, then the logging costs would include the costs of felling and cutting the timber into logs and the skidding of the logs onto a truck. Also, other associated logging costs might be included, such as the opening and closing of logging roads, skid trails, and landings. Transportation costs would be the costs associated with transporting the logs to the mill, including the cost of loading and unloading the truck.

In addition to these product values and production costs, there are a number of factors that affect the value of the timber in a particular woods. Some of these include:

Species—Black walnut is, for example, much more valuable than hickory.

Size—Larger trees have more usable volume and clear wood than small trees. Also, in general, sawtimber-sized trees are of greater per unit value than pulpwood-sized trees.

Quality—Large trees with no branch scars will have more knot-free wood than trees with many branch stubs. In general, a high-quality, high-value tree has the greatest value, while the low-quality, low-value tree will have the least value. However, as the quality declines, the price differences among most species decrease.

Volume of sale—On large sales, fixed logging costs can be spread over the larger volumes so that the logger can pay more per unit volume for the timber.

Distance to market—The closer the mill, the less are the hauling costs.

Site accessibility—How easily can the timber tract be reached?

Logging difficulty—Steepness of terrain and soil water conditions determine the equipment that can be used and the production rates.

Market conditions—Poor markets mean lower timber prices.

Buyer's log inventory—When log inventory is low, buyers often pay more for logs to insure the continuance of the mill operation.

For general price information and market trends for Indiana, consult the Forest Product Price Report compiled by Purdue's Department of Forestry and Natural Resources and published in the newsletter The Woodland Steward (contact Forestry Extension Services, Department of Forestry and Natural Resources, Purdue University, Forestry Building, West Lafayette, Indiana 47907 for more information).

This report is distributed by the Cooperative Extension Service and is available at County Exten-

sion Offices and Indiana Division of Forestry District Offices. Also, check with local primary wood-using industries and consulting foresters for local price conditions and fluctuations.

Ways Timber Can Be Sold

There are many methods of marketing timber. Trees can be designated for harvest by boundary limits, diameter limits, or individual markings. Another method is to fell the tree and sell the logs rather than the standing timber. Combinations of methods are sometimes more suitable.

Marketing by boundary limits means that all trees in a designated area will be sold. Clearcutting and land clearing are examples where only boundaries may be marked. Diameter limit implies that all trees larger than a certain diameter (measured at breast height above the ground level on standing trees or on the stump of cut trees) will be cut. The boundary limit is normally present in this case also. Care must be taken when using diameter limit cuts to prevent "high grading" which can result in either the cutting of only the best trees and/or the removal of smaller diameter trees with high-quality sawlog potential before they reach financial maturity. Periodic high grading of a woodland can result in an accumulation of poorquality trees over time and decrease the future potential value of the residual stand.

The method of individual markings designates each tree to be cut. Only trees which are marked with paint spots, one at eye level and one at the base (your receipt), may be cut. This basal paint mark will remain visible on the stump following cutting as the woodland owners check that only trees marked for sale were cut. This is the method most commonly recommended for small, private, nonindustrial woodlands.

Another method which has many of the advantages of a marked tree sale is the felling of trees and selling of the logs. One of the advantages of selling logs is that a knowledgeable person can sell logs of a particular species and grade to the highest paying industry. This is specialized marketing as opposed to the more typical integrated harvests. Specialized marketing can be done with each of the suggested selling methods by offering the timber you have to sell to the appropriate industries. However, this may hinder the sale of the low-value trees which may remain after quality timber, such as veneer, have been harvested. These lower value trees will occupy growing space that should be available for the future development of higher value timber. Therefore, compare the total value and management implications of a specialized sale before deciding on that method. Also, cutting and selling logs is definitely not recommended for the average woodland owner. Only individuals very knowledgeable in timber marketing and the log specifications required by the wood-using industries should consider this method.



Steps in Marketing Timber

The major steps in marketing timber can be listed as follows:

- 1. Seek professional assistance.
- 2. Estimate timber volume and value.
- 3. Advertise the sale.
- 4. Determine bid procedures.
- 5. Negotiate the timber sale contract.
- 6. Monitor the sale for compliance.
- 7. Consider timber management.

Professional Assistance

For most people, selling timber is not a common transaction. Unless a person owns considerable timberland and makes frequent timber sales, his chances for becoming proficient are few. Timber buyers are pros. Their employers expect them to purchase timber that meets company needs at a cost acceptable to the company. For a woodland owner to be

successful in marketing timber, he should seek the assistance of a professional forester. In Indiana, limited marketing assistance is available to woodland owners at no charge from District Foresters who are employed by the Indiana Division of Forestry. Complete timber marketing service from timber volume and value estimation to sale closure is available on a fee basis from private, self-employed, consulting foresters.

Volume and Value Estimation

Trees selected for marketing should be clearly marked for easy identification and location by prospective timber buyers and subsequent loggers. As described earlier, trees for sale can be individually marked or designated by boundary limits.

Next, of the trees to be sold, an estimate of the volume and quality by species must be determined. This should be done regardless of the designation method used. The volume of trees to be marketed as veneer logs or sawlogs is usually measured in board feet (Doyle Rule). Pulpwood is sold on a weight (pounds), volume (cords), or number of trees/tree tops basis.

Finally, the total value of the timber to be marketed should be estimated. If a consulting forester's services are employed, he should give an estimate of stumpage value. An estimate of stumpage value can also be made by using the most recent Indiana stumpage price report. However, this should be done with caution because these stumpage prices represent statewide averages and may not reflect local conditions. Use the estimated value as a guide when trying to decide to accept or reject bids.

Sale Advertisement

Probably the most important step in marketing forest products is proper advertisement. For a timber sale to be successful, timber buyers must receive notification of the upcoming sale and be convinced that the timber being sold meets their needs. The more information provided to a potential timber buyer, the better the chances are of attracting interested buyers to inspect and bid on the timber.

When preparing an announcement of a timber sale, the following information should be included:

- Date bids will be received and opened or that an auction will be held.
- Dates property will be available for inspection.
- Legal description of sale area and map of location. (optional)
- If the timber has been marked, a list of trees by species, number, and volume. If not marked, an estimate of volume. In either case, an estimate of

the quality may be made.

- Listing of contract provisions and form of sale desired. Possibly the inclusion of a sample contract.
- Address where bids should be returned.

Right to refuse any or all bids.

Other items you believe pertinent to the sale.
 An example timber sale advertisement is given.

To obtain maximum value for your timber, attempt to contact as many buyers as possible. Do not be satisfied with just the mill down the road or the one that employs a friend or relative. This is a business transaction and bids from as many buyers as possible are desirable. Names and addresses of timber buyers are available from a variety of sources and a direct mailing to these buyers is the surest method of notification. Also, newspaper advertisements can be purchased and word of mouth advertisement may be helpful. Again, direct buyer contact is the best marketing approach.

An additional advertising outlet is the Indiana Licensed Timber Buyers Bulletin. The bulletin is compiled monthly by the Indiana Division of Forestry and sent to all companies and individuals licensed to purchase timber in the state. The service is offered by the state to assist woodland owners in locating markets for their timber products and to aid licensed buyers in locating sources of timber. There is no

charge for the listings.

All persons and firms engaged in the business of timber buying in Indiana, including out-of-state buyers, are required to have a registration certificate issued by the Indiana Department of Natural Resources. "Timber" is defined as trees, standing or felled, and logs which can be used for sawing or processing into lumber. Firewood, Christmas trees, fruit and ornamental trees are not included. (See FNR-83, "Laws Influencing the Private Woodland Owners in Indiana.")

The license to purchase timber must be renewed annually. Under the law, all licensed timber buyers are required to have a surety bond or certificate of deposit on file with the Department of Natural Resources. In the event the licensed timber buyer fails to pay the timber grower for timber purchased, or fails to pay legally determined damages for timber wrongfully cut by a licensed timber buyer, the timber grower can seek forfeiture of that bond. This law assures payment to the grower for timber purchased at a set price if the party purchasing the timber is a licensed timber buyer.

Each licensed buyer and registered agent is furnished an identification card giving his name, the person or company he is buying for, the address of the place of business, and the license number. A list of the licensed buyers is prepared annually by the Indiana Division of Forestry.

Bid Procedures

There are two fundamental bid procedures: oral and sealed. The most frequently used is the sealed bid. Sealed bids are submitted at the time and place designated in the announcement of timber sale. These sealed bids may be received in person or through the mail. Sealed bids are commonly used because they ease administration of the sale, reduce time spent on the sale for both buyers and sellers, and require the receipt of earnest money at the time of the bid.

Oral bids are auctions where the interested buyers bid on the timber at a particular time and place. One advantage to this procedure is that interested buyers will bid the price to the highest level possible. However, many buyers do not like oral auctions and will not participate in such transactions. If there are several interested buyers and the timber is unusual in terms of species, volume, and/or quality, an auction bid may be useful in obtaining top dollar for the timber. A variation of a straight oral bid procedure is to require a written opening bid with earnest money and then opening the auction bidding to those who submitted a written initial bid.

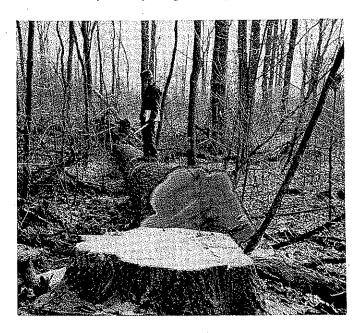
In the timber sale announcement, you should reserve the right to refuse any and all bids. This item protects you from having to sell your timber to anyone even after the auction is completed or the sealed bids are opened. At the appointed time and place, begin the auction or open the sealed bids. Representatives of the interested buyers frequently will be present. This is a business transaction, so be professional. A business-like attitude during bid opening should insure a more professional relationship with the logger. Professionalism promotes professionalism! After the auction or the opening of the sealed bids, select the winning bidder or reject all bids. Accept a bid only if you feel that the money offered is high enough when compared to the estimate and the other bids, and that the winning bidder is trustworthy and competent. In the sealed bid situation, do not open the bids, reject the bids, and then ask for higher bids from the buyers present. The buyers present are not prepared to bid again, and those not present would not be able to bid. Selection of the winning bidder is called the awarding of the bid. After awarding the bid, a timber sale contract needs to be negotiated with the winning bidder.

Timber Sale Contracts

There are two basic types of timber sale contracts: lump sum and "economic interest retained." There are, of course, many variations of these basic types.

Lump sum sales are the most common and, under normal conditions, the recommended contractual arrangement. In a lump sum sale, the buyer makes a single offer for the designated timber, and this offered amount is paid to the seller before any timber is cut. A variation of the lump sum sale would be the delayed payment or long-term payment contract. Again, the timber is sold for a given dollar value, but payment is made in a series of partial payments. The schedule of payments should be included in the written contract.

With the economic interest retained contract, the timber owner retains ownership of the trees until they are severed from the ground. One variation of this type of contract is the "pay as you cut" contract. In this contract, the buyer agrees to purchase timber at



a given price per unit of measure as it is cut. Normally prices will vary by species and tree grade. As with any of the other variations of retained interest contracts, the determination of the volume and grade of the material cut is an administrative burden. Frequent inspection by the timber owner or his agent is required during the timber harvesting.

Another variation is the "shares sales." Here the timber owner and the timber logger agree to share the money received for the logs which the logger has cut and delivered to a wood-using industry. A slight variation from this is contract logging where the logger is paid a set fee per unit volume to cut and haul the timber. The timber owner receives the value paid by a wood-using industry for the delivered logs. To prevent wide discrepancies between landowner estimates of timber volume sold and the volume that is delivered to the mill, it may be necessary for the landowner or his agent to scale the logs at the woods landing before loading and hauling.

Generally, the straight lump sum sale is recommended for private, nonindustrial, woodland owners. However, special marketing conditions may require that one of the other contracts be used. If one of the "economic interest retained" forms is used, be sure to indicate in the contract how the trees which are cut will be measured and graded and by whom.

To reduce the possibility of misunderstandings and disagreements, a written contract between the buyer and seller is essential. "Handshake" agreements are not a good business practice. Most timber buyers and foresters can provide standard timber sales contracts to the woodland owner. If utilizing such a contract, be sure to have it reviewed by your personal legal advisor.

The timber sale contract need not be fancy or complicated but should indicate what the woodland owner and timber buyer have agreed to with respect to the sale. The sale contract should provide for the transfer or exchange of the property from seller to buyer. The agreed upon price, if a lump sum, or price per unit volume, if an economic interest retained contract, should be stated. A legal description of the land along with any other locational information required to identify the sale area should be included. A description of how the trees are designated or marked for sale should be included. Also, the schedule of payments should be agreed upon.

Additional restrictions on both the buyer and seller can be included. A provision that the seller cannot enter into additional contracts involving the area for the period covered in this contract without the buyer's permission may be included. The buyer and his employees shall have the right of access to the sale area at all reasonable times. The seller is the lawful owner of the property conveyed to the buyer.

Damage to other trees and/or existing improvements from the harvest operation should be considered. How will these be assessed and for what types of damages must the seller be reimbursed? A provision on the cutting of trees not sold in the contract should be included. The status of sold but uncut trees should be determined. Must all marked trees be cut?

The creation and location of logging roads or a method of locating logging roads should be agreed upon. Road construction specifications should be outlined and post-logging grading and water control should be addressed.

Include the number of days or an ending date that the buyer has to complete the harvest and how an extension of this date may be arranged. Reasons for extensions could include wet weather, prevention of crop damage, or conflicting uses at various times of the year.

A disclaimer of the seller's liability for personal injury during the buyer's performance of the contract

should be included. You may want or require the buyer to carry insurance to guarantee his ability to pay in a liability case. If you desire the buyer to furnish insurance, it should be stated in the announcement of the timber sale. Methods of modifying the contract, conditions for a resale, a description of the trees conveyed and, finally, the arbitration procedures if a dispute arises can be included.

The final part of a contract is the signatures. Read the contract carefully before signing it. Be sure that the seller and the buyer understand and agree on all the provisions of the contract. Finally, since timber is treated as real property, the conveyance should be recorded at the county courthouse for the protection of all parties. A sample timber sale contract is shown.

Monitoring the Sale for Compliance

The woodland owner and one of the contract parties have the authority and responsibility to inspect the logging and harvesting operation. This ensures that all contract provisions are being met, that only timber designated for harvesting is being removed, and that unnecessary damage is not done. If there are any questions or complaints, notify the purchaser immediately and attempt to rectify the problems at once. Usually the problems can be worked out without the use of a third party.

After all cutting is completed, make a final inspection of the property to ensure that all contract violations are corrected or compensated for, then release the buyer from any obligation. This is done by a letter to the buyer stating that he has met all the obligations of the contract and is released from further obligations.

Other Considerations

Minimization of Federal Income Taxes

Income from stumpage sales is usually eligible for treatment as long-term capital gains. This can significantly reduce the amount of federal income taxes paid and substantially increase your profit from your woodlands. For a complete discussion of tax considerations in selling timber, see the following publication.

Timber Tax Management for Tree Farmers is for sale by the American Forest Council, Suite 320, 1250 Connecticut Ave., N.W., Washington, D.C. 20036, \$20 per copy. Make checks payable to American Forest Institute.

Post Harvest Investment

By investing part of the income received from the harvest in your woodland, you will be providing for future harvests. Examples of post harvest investments are tree planting, fencing to restrict grazing, road improvements or timber stand improvement. Also, future planning of forest management activities is a good idea following timber marketing.

Summary

Most "satisfactory" timber sales are the result of planning. Organization and patience are essential. Buying and selling timber is more than just wheeling and dealing over price. It is a business transaction and the implementation of your forest management plan.

Related Publications

Contact your county Extension agent or Publications Mailing Room, 301 S. 2nd Street, Lafayette, Indiana 47905.

- FNR-4 How to Make and Use the Tree Measuring Stick
- FNR-84 Hardwood log Grades and Lumber Grades: Is There a Relationship?
- FNR-86 The Economics of Timber Stand Improvement
- FNR-87 Forestry and Wildlife Management Assistance Available to Indiana Woodland Owners: Providers and Programs
- FNR-91 Financial Maturity: A Guide to When Trees Should Be Harvested
- FNR-93 Why Many Shade Trees Cannot Be Marketed
- FNR-101 Timber Harvesting and Logging Practices for Private Woodlands



Letter of Advertisement for Timber Sale

of	is	s accepting sealed bids on marked trees from r	now until (time), (day), (date), (year), at
		at	
All lic	censed timber buyers are invited t	to be present at the bid opening.	
Т	he trees have been marked with a	a (spot) (number) ("X") in	colored paint at breast
heigh	nt and a spot of the same colored p	paint below the average stump height. All such	marked timber is located in
sub-s	section of Section	, Township	, Range
		ounty, Indiana. The above advertiser herein c	
the le	egal right to advertise and dispose	e of the marked trees.	
	•	Terms of the Sale	
	1. been made public as adve	reserves the right to accept or reject ertised.	t any and all sealed bids after they have
	2. Only trees marked in the	manner described above are being sold.	
	the purchaser to have insu from the purchaser's perf		seller from all liability which might arise
		the following schedule:	
		efore the cutting of marked trees begins.	
	5. Timber removal will take	place from the property on or before	
			, 19
	6. The purchaser must poss	ess a Timber Buyer's License issued by the St	ate of Indiana for the year 19
	removed from fields, fen	o fences, roads, fields, crops, or remaining t nces or waterways, and repairs made before that they judge will effect unreasonable dama	e the contract expires. Buyers are no
·		Whom to Contact	
All i	nquiries, sealed bids, etc., concer	rning this sale should be directed to:	
		es marked and a rough map showing the app	

Timber Sale Description

COUNTY: Tippecanoe County

LOCATION: Section 31, T22N, R5W, Wayne Twp., East side of CR 625W. Trees marked with yellow paint.

SALE DATE: January 16, 1982 at 10:00 A.M. at Mr. A. Timber Owner's residence on the farm.

TYPE OF SALE: Sealed bid, seller reserves right to reject all bids.

OWNER: Mr. A. Timber Owner, R.R. #2, Box 625, Lafayette, IN 47905. Please notify Mr. Timber Owner

before looking at timber by phone at 317/000-0000 (home) or 317/111-1111 (office).

Species	No. Trees	Est. Vol. Bd. Ft. Doyle	
White Oak	44	5,790 Veneer	
		10,930 Sawlogs	
Sugar Maple	53	12,850	
Tulip	15	6,630	
Hickory	22	5,080	
White Ash	12	1,690	
Red Oak	26	7,103	
Black Cherry	5	537	
Miscellaneous*	19	4,429	
Totals	196	55,039	

^{*}Miscellaneous includes American Beech, American Elm, Basswood, Red Elm, and Sassafras.

TIMBER SALE CONTRACT

	Note: Seller and	Buyer should initial o	and date each page o	of a multiple page o	ontract!
Contract er	ntered into this		day of		19,
Indiana hero	einafter called the Seller	r, and			
hereinafter	called the Purchaser, V	VITNESSETH:			
1.					
					set forth in this contract all
	the standing timber m	arked for cutting upo	on an area of approxi	mately	
	acres in the		of Section		
					, County, Indiana on land
	owned and recorded i	n the name of			
	The location of the ar	*		·	
				Oollars (\$)
	payment to be made	in accordance with th	ne following schedule:	:	
	The Purchaser furthe	r agrees to post a per	rformance bond of _		
			Dollars (\$) with
2		rees to dispose of th	ne timber conveyed i		strict accordance with the
	a. All trees to be incl	uded in this sale will	be marked as follows	ie te	
	b. No concurrent con by the Seller with	ntract involving the ar out the written conse	rea or period covered nt of the Purchaser.	in this contract has	been or will be entered into
	c. The Purchaser an purpose of carryir	d his employees shall ng out the terms of th	have access to the a	rea at all reasonabl	le times and seasons for the

	d.	The Seller covenants that he is the lawful owner of the above timber and that no indebtedness or encumbrance exists against the same.				
	e.	Other Conditions: (examples—stoppage for wet weather, protection of adjoining agricultural crops, hunting season, etc.)				
3.		ne Purchaser further agrees to cut and remove the timber conveyed in the contract in strict accordance with a following conditions:				
	a.	Unless an extension of time is agreed upon in writing between the Seller and the Purchaser, all timber shall be paid for, cut and removed on or before and not later than the day of				
	b.	Only marked trees may be cut, but the Purchaser shall retain the right to leave standing such marked trees as he may consider not to contain merchantable material worth removing from the area.				
	c.	Unmarked trees and young timber shall be protected against unnecessary injury from felling and logging operations.				
	d.	Necessary logging roads shall be cleared by the Purchaser only after their locations have been definitely agreed upon with the Seller or his representative.				
	e.	During the life of this contract and on the area covered, care shall be exercised by the Purchaser and his employees against the starting and spread of fire and they shall take reasonable precautions to prevent and control fires.				
	f.	Fences damaged or destroyed by the Purchaser in the logging or removal of timber included in this contract shall be repaired or replaced by the Purchaser to the condition existing at the time the logging begins.				
	g.	Any liability for damage, destruction, or restoration of private or public improvements occasioned by or in the exercise of this contract shall be the sole responsibility of the Purchaser.				
	h.	Other conditions: Examples would be the following:				
		 All marked trees will be felled. Tops of trees marked for sale are property of seller/purchaser. All litter/garbage created by loggers is the responsibility of the purchaser and is to be picked up weekly. Specifically identified plantings, streams, special trees, wildlife areas, etc. are to be avoided by the logger. All main logging roads and skid trails will be graded and water barred before termination of this contract. 				
4.	pe Pu ar	the Purchaser hereby agrees to protect, indemnify, and save harmless the Seller from any and all liability for ersonal injuries, death and/or property damage suffered or incurred by any person in connection with the urchaser's performance of this contract. The Purchaser also agrees to furnish insurance of the following types ad amounts: xamples—liability & workmen's compensation)				
5	- . S	eller and Purchaser mutually agree as follows:				
_		All modifications of this contract will be reduced to writing, dated, signed and witnessed, and will be attached to this contract.				

b. Resale of any portion of the standing timber conveyed by this contract will not release the Purchaser from all the terms of this contract unless the Seller signs a written release.

	c.	The total number of trees conveyed is, composed as follows:				
		· .				
	d.	In case of dispute over the terms of this contract, final decision shall rest with a reputable person to be mutually agreed upon by parties to this contract, and in the case of further disagreement, with an arbitration board of three persons, one to be selected by each party to this contract and the third to be selected by the other two.				
IN WITNES	ss v	WHEREOF, the parties have executed this agreement as of the day and year first above written.				
WITNESS:						
20.1000		(Purchaser)				
		(Licensed Timber Buyers Number)				
WITNESS:						
		(Seller)				

